



Docket No.: 3254-0121PUS1  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Young-Nam HWANG et al.

Application No.: 10/501,910

Confirmation No.: 8720

Filed: July 20, 2004

Art Unit: 1771

For: A COMPOSITE SHEET USED FOR  
ARTIFICIAL LEATHER WITH LOW  
ELONGATION AND EXCELLENT  
SOFTNESS

Examiner: A. T. Piziali

**DECLARATION UNDER 37 CFR 1.132**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, HWANG, Young-Nam, do declare and say as follows:

1. I am a graduate from Seoul National University on February 24, 1994, specializing in textile and polymer sciences.
2. I have been employed by Kolon Industries, Inc., from November 1, 1993 to the present in the position of Senior Research at Kolon Central Research Park.
3. The following comparative tests were performed under my direction and control:

With the exception that the denier of ultra fine fibers of a non-woven fabric and the denier of ultra fine fiber of the yarn constituting the woven fabric are changed as indicated in the Table, hereinbelow, Samples 2 to 5 for artificial

leather were prepared in the same manner, using the same method as that in Example 1 of the present application. Samples 2 to 5 were also dyed under the same dyeing conditions and these samples are attached to the present Declaration for the Examiner's observation.

TABLE

	SPEC		PROPERTY	
	Fineness of the ultra fiber of the non-woven layer	Fineness of the fine fiber of the woven or knitted fabric layer	Stiffness	Elongation of constant load
Sample 2	0.15. denier	0.06 denier	65	3.5
Sample 3	0.15 denier	1.0 denier	83	4.1
Sample 4	0.15 denier	0.06 denier	67	3.8
Sample 5	0.15 denier	1.0 denier	89	4.6

The properties of Samples 2 to 5 are shown in the above Table. Samples 2 and 4 show that when the fineness of the fine fabric of the woven or knitted fabric is not more than the fineness of the fine fiber of the non-woven fabric, as compared to Samples 3 and 5 which show that the fineness of the fine fiber of the woven or knitted fabric is more than the fineness of the fine fiber of the non-woven fabric, Sample 3 has a worse softness and appearance (please see the actual samples) than Sample 2 and also a higher stiffness and elongation at

constant load when compared to Example 2. Also Sample 5 has a worse softness and appearance when compared to Sample 4 and also exhibits a higher stiffness and elongation at constant load when compared to Example 4. The rear surface of the actual samples clearly show in Samples 2 and 4 the advantageous results of the present invention, when compared to Samples 3 and 5.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: \_\_\_\_\_

By: \_\_\_\_\_  
HWANG, Young-Nam